

### DATA SHEET

# VAT1-600 Three-Phase AC Voltage Attenuator



## **OVERVIEW**

The VAT1-600 attenuator module easily plugs into the PQube 3, and PQube 3e.

Transform your power analyzer into a dual voltage analyzer\*.

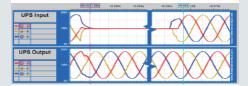
It is ideal for monitoring of input and output voltages of UPS, voltage regulators, transformers, and other voltage sag mitigation equipment.

\*Note: The VAT1 works in combination with the PQube 3 'dual voltage' mode of PQube 3. Powers computations are replaced by measurements of a second set of 3-phase voltages.

## **FEATURES**

- Connects directly to voltages up to 600 V (no external PT required), 3-phase wye, delta, or single-phase
- Compact module, plugs-in to the left of the PQube 3 (PQube 3e), comes with a wire harness to connect to PQube 3 current terminals
- Outstanding voltage accuracy and frequency response (DC up to 3 kHz harmonics up to rank 50)
- Synchronous sampling of all six (2 X 3) voltage channels (at 512 samples/cycle)

### RESULTS



Simultaneous waveform recording of the input and the output voltage of a UPS during a grid outage.

## Part Number: VAT1-600-XX

# **SPECIFICATIONS**

VAT1-600 MEASUREMENT CONNECTIONS	
Voltage In (top)	V1, V2, V3, V4
Input voltage range	0 VAC ~ 600 VAC L-N or L-L
Voltage configurations	Single-phase (up to 3 single phase voltages with a common neutral) 3-phase 4-wire (Wye/star) or 3-wire (Delta)
Input Impedance	4.8 MΩ to Earth
Voltage Out (bottom)	Va, Vb, Vc, Vd   Connects to PQube 3: I1, I2, I3, & I4 input terminals
Output voltage range (differential)	0 V ~ 10 V Note: PQube 3 "current input range" needs to be selected to "HIGH" in the configuration
Attenuation ratio	100:1
Earth	Note: Connection to earth is done via snap-in connector to PQube 3 (left side)
VAT1-600 TECHNICAL SPECIFICATIONS	
Dimensions (L x W x H)	4.21 in X 1.64 in X 2.38 in (metric: 10.7 cm X 4.17 cm X 6.05 cm)
Installation	DIN rail mountable
Accuracy (±% rdg ±% FS)	±0.05% (specification) ±0.015% (factory test pass/fail limit) At 50/60 Hz, 5% ~ 100% FS, where FS = 600 VAC
Frequency bandwidth	DC ~ 3 kHz
Harmonic response	Up to 50th order at 50/60 Hz, accuracy: ±0.5% reading (typical)
Overvoltage category	CAT IV at 300 VAC, CATI II at 600 VAC

